

The Golden Rule: Why Urine Drug Monitoring is Good For Everyone



CASE PRESENTATIONS

Screening vs. Confirmation



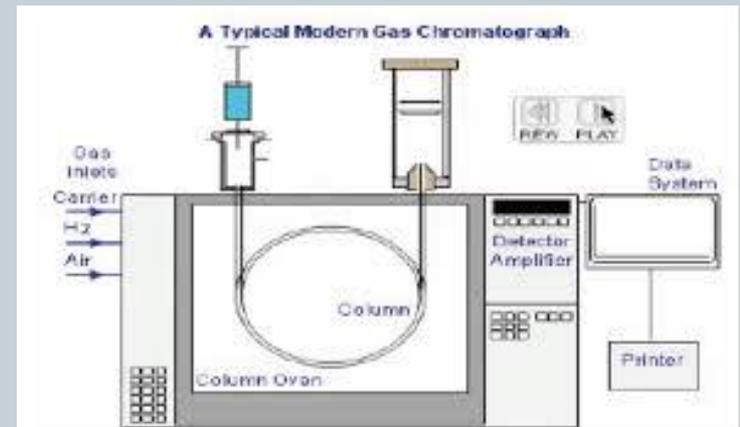
- **Screening Tests**
 - Urine Dipstick
 - Immunoassay
 - ✦ Higher cut-off concentration
 - ✦ Less sensitive
 - ✦ High false positive
 - ✦ High false negative



Screening vs. Confirmation



- **Confirmatory Testing**
 - Gas Chromatography Mass Spectroscopy (GCMS)
 - Liquid Chromatography Mass Spectroscopy (LCMS)
 - ✦ Can detect very low levels (50ng/ml)
 - ✦ Very sensitive and specific
 - ✦ Eliminates false (+)/(-)



Case #1



- 65 y/o caucasian female
- Medications prescribed:
 - Norco (hydrocodone/apap) 5/325 q4-6prn max 2/d

Screen



Urine Drug Screen

Alcohol-Urine	NEGATIVE	Cutoff 100 mg/dL
Amphetamine-Urine	NEGATIVE	Cutoff 500 ng/mL
Barbiturates-Urine	NEGATIVE	Cutoff 200 ng/mL
Benzodiazepines-Urine	NEGATIVE	Cutoff 200 ng/mL
Cocaine-Urine	NEGATIVE	Cutoff 150 ng/mL
Fentanyl-Urine	NEGATIVE	Cutoff 2 ng/mL
Heroin (6-AM)-Urine	NEGATIVE	Cutoff 10 mg/dL
Methadone-Urine	NEGATIVE	Cutoff 100 ng/mL
Opiates-Urine	POSITIVE	Cutoff 300 ng/mL

Confirmation



Legend	SUMMARY			
✓ = Consistent ✗ = Inconsistent ◆ = Prescribed	Prescribed	Not Prescribed / Inconsistent		
	✓ Norco™			
Test Ordered	Result	Cutoff	medMATCH™	Lab
PAIN MGMT,OPIATES EXPAND, QN,W/medMATCH,U			<i>Endnote 1</i>	AP
Morphine	Negative	50 ng/mL		
Oxymorphone	Negative	50 ng/mL		
Hydromorphone	175 H	50 ng/mL	See Note 1	
Codeine	Negative	50 ng/mL		
Oxycodone	Negative	50 ng/mL		
◆ Hydrocodone	153 H	50 ng/mL		

Case #2



- 38 y/o caucasian female
 - Medications prescribed
 - ✦ Butrans patch (buprenorphine) 10mcg/hr patch qweek
 - ✦ Valium 5mg (pre-procedure)
 - Took 2 tablets 4 days prior to the urine drug monitoring test

Screen



Urine Drug Screen

Alcohol-Urine	NEGATIVE	Cutoff 100 mg/dL
Amphetamine-Urine	NEGATIVE	Cutoff 500 ng/mL
Barbiturates-Urine	NEGATIVE	Cutoff 200 ng/mL
Benzodiazepines-Urine	POSITIVE	Cutoff 200 ng/mL
Cocaine-Urine	NEGATIVE	Cutoff 150 ng/mL
Fentanyl-Urine	NEGATIVE	Cutoff 2 ng/mL
Heroin (6-AM)-Urine	NEGATIVE	Cutoff 10 mg/dL
Methadone-Urine	NEGATIVE	Cutoff 100 ng/mL
Opiates-Urine	NEGATIVE	Cutoff 300 ng/mL
Oxycodone-Urine	NEGATIVE	Cutoff 100 ng/mL

Confirmation



Legend	SUMMARY			
	Prescribed		Not Prescribed / Inconsistent	
✓ = Consistent ✗ = Inconsistent ◆ = Prescribed	Buprenorphine	Gabapentin		
Test Ordered	Result	Cutoff	medMATCH™	Lab
PAIN MGMT, BUPRENORPHINE, QN,W/medMATCH,U			Endnote 1	AP
Buprenorphine	11.0 H	2 ng/mL		
◆ Norbuprenorphine	11.6 H	2 ng/mL	See Note 1	
PAIN MGMT,BENZODIAZEPINE, QN,W/medMATCH,U			Endnote 1	AP
Midazolam	Negative	50 ng/mL		
Alphahydroxyalprazolam	Negative	50 ng/mL		
Alphahydroxytriazolam	Negative	50 ng/mL		
Oxazepam	4147 H	50 ng/mL	See Note 2	
Lorazepam	Negative	50 ng/mL		
Nordiazepam	824 H	50 ng/mL	See Note 3	
Temazepam	2269 H	50 ng/mL	See Note 4	

Case #3



- 81 y/o caucasian male
 - Medications prescribed
 - ✦ Oxycontin 20mg q12h routinely
 - ✦ Percocet 7.5/325 1 po q4-6h prn max 2/d
 - ✦ Xanax 0.5mg 1 po prn severe anxiety
 - He takes 1 tablet occasionally for severe anxiety (max 15/month)

Screen



Urine Drug Screen

Alcohol-Urine	NEGATIVE	Cutoff 100 mg/dL
Amphetamine-Urine	NEGATIVE	Cutoff 500 ng/mL
Barbiturates-Urine	NEGATIVE	Cutoff 200 ng/mL
Benzodiazepines-Urine	POSITIVE	Cutoff 200 ng/mL
Cocaine-Urine	NEGATIVE	Cutoff 150 ng/mL
Fentanyl-Urine	POSITIVE	Cutoff 2 ng/mL
Heroin (6-AM)-Urine	NEGATIVE	Cutoff 10 mg/dL
Methadone-Urine	NEGATIVE	Cutoff 100 ng/mL
Opiates-Urine	POSITIVE	Cutoff 300 ng/mL
Oxycodone-Urine	POSITIVE	Cutoff 100 ng/mL

Confirmation



Legend	SUMMARY			
	Prescribed		Not Prescribed / Inconsistent	
✓ = Consistent ✗ = Inconsistent ◆ = Prescribed	✓ Oxycodone	✓ OxyContin™	✗ Alphahydroxyalprazolam	
Test Ordered	Result	Cutoff	medMATCH™	Lab
PAIN MGMT, FENTANYL, QN, W/medMATCH,U			<i>Endnote 1</i>	AP
Fentanyl	Negative	0.5 ng/mL		
Norfentanyl	Negative	0.5 ng/mL		
PAIN MGMT, BENZODIAZEPINE, QN, W/medMATCH,U			<i>Endnote 1</i>	AP
Midazolam	Negative	50 ng/mL		
Alphahydroxyalprazolam	3101 H	50 ng/mL	INCONSISTENT	
Alphahydroxytriazolam	Negative	50 ng/mL		
Oxazepam	Negative	50 ng/mL		
Lorazepam	Negative	50 ng/mL		
Nordiazepam	Negative	50 ng/mL		
Temazepam	Negative	50 ng/mL		
PAIN MGMT, OPIATES EXPAND, QN, W/medMATCH,U			<i>Endnote 1</i>	AP
Morphine	Negative	50 ng/mL		
Oxymorphone	5534 H	50 ng/mL	See Note 1	
Hydromorphone	Negative	50 ng/mL		
Codeine	Negative	50 ng/mL		
◆ Oxycodone	10564 H	50 ng/mL		
Hydrocodone	Negative	50 ng/mL		

Endnote 1

Case #4



- 63 y/o caucasian female
 - Medications proscribed
 - ✦ Morphine Sulfate Extended Release 30mg 12h routinely
 - ✦ Norco 7.5/325 1 po q6-8h prn max 2/d

Screen



Urine Drug Screen

Alcohol-Urine	NEGATIVE	Cutoff 100 mg/dL
Amphetamine-Urine	POSITIVE	Cutoff 500 ng/mL
Barbiturates-Urine	NEGATIVE	Cutoff 200 ng/mL
Benzodiazepines-Urine	NEGATIVE	Cutoff 200 ng/mL
Cocaine-Urine	NEGATIVE	Cutoff 150 ng/mL
Fentanyl-Urine	NEGATIVE	Cutoff 2 ng/mL
Heroin (6-AM)-Urine	NEGATIVE	Cutoff 10 mg/dL
Methadone-Urine	NEGATIVE	Cutoff 100 ng/mL
Opiates-Urine	POSITIVE	Cutoff 300 ng/mL

Confirmation



Legend	SUMMARY			
	Prescribed		Not Prescribed / Inconsistent	
✓ = Consistent ✗ = Inconsistent ◆ = Prescribed	✗ Hydrocodone ✓ Morphine	✗ Norco™		
Test Ordered	Result	Cutoff	medMATCH™	Lab
PAIN MGMT, AMPHETAMINES, QN,W/medMATCH,U			<i>Endnote 1</i>	AP
Amphetamine	Negative	250 ng/mL		
Methamphetamine	Negative	250 ng/mL		
PAIN MGMT,OPIATES EXPAND, QN,W/medMATCH,U			<i>Endnote 1</i>	AP
◆ Morphine	31903 H	50 ng/mL		
Oxymorphone	Negative	50 ng/mL		
Hydromorphone	565 H	50 ng/mL	See Note 1	
Codeine	Negative	50 ng/mL		
Oxycodone	Negative	50 ng/mL		
◆ Hydrocodone	Negative	50 ng/mL	INCONSISTENT	

Case #5



- 49 y/o caucasian female
 - Initial new patient urine drug testing
 - ✦ (screen and confirmation)
 - Currently prescribed no medications
 - ✦ Due to initial new patient evaluation and screening tests indicating high ORT and other risk factors, no opioids prescribed at her initial visit

Screen



Urine Drug Screen

Amphetamine-Urine	NEGATIVE	Cutoff 500 ng/mL
Barbiturates-Urine	NEGATIVE	Cutoff 200 ng/mL
Benzodiazepines-Urine	NEGATIVE	Cutoff 200 ng/mL
Cocaine-Urine	POSITIVE	Cutoff 150 ng/mL
Fentanyl-Urine	NEGATIVE	Cutoff 2 ng/mL
Methadone-Urine	NEGATIVE	Cutoff 100 ng/mL
Opiates-Urine	NEGATIVE	Cutoff 300 ng/mL
Oxycodone-Urine	NEGATIVE	Cutoff 100 ng/mL
Phencyclidine-Urine	NEGATIVE	Cutoff 25 ng/mL
Tapentadol-Urine	NEGATIVE	Cutoff 200 ng/mL
Tramadol-Urine	NEGATIVE	Cutoff 200 ng/mL
Cannabinoid-Urine	POSITIVE	Cutoff 100 ng/mL
Creatinine-Urine	Normal	Normal
pH-Urine	7.08	4.70-7.80
Oxidants-Urine	NEGATIVE	Negative
Specific Gravity-Urine	1.024	1.003-1.035

Confirmation



Legend	SUMMARY			
	Prescribed	Not Prescribed / Inconsistent		
✓ = Consistent ✗ = Inconsistent ◆ = Prescribed		✗ Marijuana Metabolite	✗ Benzoylcegonine	
Test Ordered	Result	Cutoff	medMATCH™	Lab
PAIN MGMT, MARIJUANA METAB, QN, W/medMATCH, U			<i>Endnote 1</i>	AP
Marijuana Metabolite	333 H	5 ng/mL	INCONSISTENT	
PAIN MGMT, COCAINE METAB, QN, W/medMATCH, U			<i>Endnote 1</i>	AP
Benzoylcegonine	782 H	100 ng/mL	INCONSISTENT	